## Claims:

## Claims 1-14 (canceled)

## 15. (currently amended) A polypharmacophore represented by formula (II):

$$R_{2}$$
 $R_{3}$ 
 $R_{3}$ 
 $R_{3}$ 
 $R_{3}$ 
 $R_{3}$ 
 $R_{4}$ 
 $R_{1}$ 
 $R_{4}$ 
(II)

wherein:

 $R_1$  is  $-CO_2R_4[[,]]$  or  $-CO_2N(R_4)_2$ , aryl, alkyl, aralkyl, or aralkenyl;

R<sub>2</sub> represents independently for each occurrence H, F, Cl, Br, or I<del>, amino, azido, nitro, sulfonate, sulfonyl, cyano, hydroxyl, alkyl, aryl, heteroalkyl, heteroaryl, aralkyl, trialkylsilyl, or acyl;</del>

R<sub>3</sub> represents independently for each occurrence H, F, Cl, Br, or I<del>, amino, azido, nitro, sulfonate, sulfonyl, cyano, hydroxyl, alkyl, aryl, heteroalkyl, heteroaryl, aralkyl, trialkylsilyl, or acyl;</del>

R<sub>4</sub> represents independently for each occurrence H[[,]] <u>or</u> alkyl<del>, aryl, alkenyl, alkynyl, heteroalkyl, or heteroaryl</del>; and

the stereochemical configuration of the carbon-carbon double bond is Z, E, or a mixture of Z and E.

- 16. (canceled)
- 17. (canceled)
- 18. (currently amended) The polypharmacophore of claim 15, wherein said polypharmacopore is used to modulate A method of modulating the function of the dopaminergic system in a mammal, comprising the step of:

administering to a mammal in need thereof a therapeutically effective amount of a polypharmacophore of claim 15.

19. (currently amended) The polypharmacophore of claim 15, wherein said polypharmacophore is used to treat diseases and conditions. A method of treating a disease or condition selected from the group consisting of Alzheimer's Disease, Huntington's Disease, depression, attention deficit disorder, autism, obesity and inflammation in a mammal; comprising the step of:

administering to a mammal in need thereof a therapeutically effective amount of a polypharmacophore of claim 15.

Claims 20-54 (canceled)

- 55. (previously presented) The polypharmacophore of claim 15, wherein  $R_2$  is F.
- 56. (previously presented) The polypharmacophore of claim 15, wherein  $R_2$  is F and  $R_3$  is H.
- 57. (previously presented) The polypharmacophore of claim 15, wherein  $R_1$  is  $CO_2R_4$ .
- 58. (previously presented) The polypharmacophore of claim 15, wherein  $R_1$  is  $CO_2R_4$  and  $R_4$  is H.
- 59. (previously presented) The polypharmacophore of claim 15, wherein said compound is selected from group consisting of:

60. (previously presented) A pharmaceutical composition, comprising:

a polypharmacophore of claim 15, 55, 56, 57, 58 or 59, or a pharmaceutically acceptable salt thereof; and a pharmaceutically acceptable diluent or carrier.